**Internship Title**

Internship – 3D printing components to assist laboratory measurements

**Duration of Internship**

6 – 12 months

**Organizational Setting**

Department: NA (Nuclear Sciences and Applications)

Division: NAPC (Division of Physical and Chemical Sciences)

Section: RCRT (Radiochemistry and Radiation Technology Section)

Unit: TERC (Terrestrial Environmental Radiochemistry Laboratory)

**Main Purpose**

The main purpose of the internship is to commission and demonstrate a 3D printer system for printing components to assist laboratory measurements. This includes the setup of the system, producing an operating procedure, and designing and printing components such as sample holders to support laboratory measurement of environmental samples. It also includes the assay of materials used by the printer to ensure they are free from significant radioactive impurities.

**Tasks / Key Results Expected**

* To commission a 3D printer system including producing an operating procedure.
* Assay printer materials using gamma spectrometry to ensure they are free from significant radioactive impurities.
* Design and print a variety of components for use in the laboratory.
* Produce a technical report and presentation detailing all work undertaken.

**Knowledge, Skills and Abilities**

* Knowledge of 3D printing techniques (Asset)

**Qualifications and Experience**

* University degree in Chemistry, Physics, Engineering or a related Scientific discipline.
* Excellent written and spoken English essential; fluency in any other IAEA official language (Arabic, Chinese, French, Russian, Spanish) an asset.

**Internships**

The IAEA accepts a limited number of interns each year. The internships are awarded to persons studying towards a university degree or who have recently received a degree (see Internship web pages for further details).

The purpose of the programme is:

* To provide interns with the opportunity to gain practical work experience in line with their studies or interests, and expose them to the work of the IAEA and the United National as a whole;
* To benefit the IAEA's programmes through the assistance of qualified students specialized in various professional fields.
* The duration of an internship is normally not less than three months and not more than one year.

**Applicant Eligibility**

* Candidates must be a minimum of 20 years of age and have completed at least three years of full-time studies at a university or equivalent institution towards the completion of a first degree.
* Candidates may apply up to one year after the completion of a bachelor's, master's or doctorate degree.
* Candidates must not have previously participated in the IAEA's internship programme.
* Good written and spoken English essential; fluency in any other IAEA official language (Arabic, Chinese, French, Spanish or Russian) an asset.
* Candidates must attach two signed letters of recommendation to their application.